Application No.: 10/679,710 2 Docket No.: C1039.70074US00

In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1.- 44. (Cancelled)

- 45. (Currently Amended) A method of treating or eliminating a tumor or cancer in a subject with an immune system deficiency, comprising administering an immunostimulatory nucleic acid molecule <u>having at least one unmethylated CpG dinucleotide and comprising a nucleotide sequence</u> selected from the group consisting of 5'-purine-purine-cytosine-guanine-pyrimidine-pyrimidine-3'; 5'-purine-TCG-pyrimidine-pyrimidine-3'; and a nucleotide sequence comprising one or more 5'-TCG-3' sequences.
- 46. (Previously Presented) The method of claim 45, further comprising administering an antigen associated with a disease selected from the group consisting of a tumor, cancer, a bacterial infection, a viral infection, and a fungal infection.
- 47. (Previously Presented) The method of claim 45, wherein the immunostimulatory nucleic acid molecule is in association with a targeting means, and wherein said association is selected from the group consisting of an ionic bond and a covalent bond.

48.-51. (Cancelled)

- 52. (Previously Presented) The method of claim 45, wherein the immune system deficiency is associated with a tumor or cancer.
- 53.-93. (Cancelled)

94. (Previously Presented) The method of claim 47, wherein the targeting means is a molecule that binds to a target cell.

- 95. (Previously Presented) The method of claim 94, wherein the target cell is selected from the group consisting of a B-cell, and a natural killer cell.
- 96. (Previously Presented) The method of claim 47, wherein the targeting means is selected from the group consisting of a sterol, a lipid and a target cell specific binding agent.
- 97. (Previously Presented) The method of claim 96, wherein the lipid is selected from the group consisting of a cationic lipid a virosome, and a liposome.
- 98. (Previously Presented) The method of claim 96, wherein the target cell specific binding agent is a ligand recognized by a target cell specific receptor.
- 99. (Previously Presented) The method of claim 47, wherein said immunostimulatory nucleic acid molecule is administered orally.
- 100. (Previously Presented) The method of claim 47, wherein said immunostimulatory nucleic acid molecule is injected.